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## CONTRIBUTION TO THE KNOWLEDGE OF BRACONID FAUNA OF THE SUBFAMILY ROGADINAE (HYMENOPTERA, BRACONIDAE) OF RUSSIAN FAR EAST AND EASTERN SIBERIA. PART 2

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### Aleiodes (Neorhogas) medianus (Thomson, 1896)

Shenefelt, 1975: 1237 (Rogas); Tobias, 1976: 85 (Rogas); 1986b: 80 (Rogas); Papp, 1985a: 147; 1991: 69.

MATERIAL. Primorskii krai: 1 female, "Kedrovaya Pad'" Nature Reserve, at light, 4.VIII 1988 (E.B.); 1 male, "st. Gorskaya, Primorsk zh. d., Birulya, 29.VII [19]28". Kuril Islands: 2 females, Kunashir I., Yuzhno-Kuril'sk, Serebryanoe Lake, 24.VIII 1973 (D.K.); 1 female, 1 male, Kunashir I., Yuzhno-Kuril'sk, Lesnaya River, 19.VIII 1989 (A. Lelej); 1 female, Kunashir I., Tretyakovo, 4.VIII 1973 (D.K.); 1 male, Kunashir I., Dubovoye, 22.VII 1973 (D.K.); 1 female, Shikotan I., Krabozavodsk, 14.VIII 1973 (D.K.).

DISTRIBUTION. Russia: Primorskii krai. (first record), Kuril Is. (first record), Irkutskaya oblast', European part. Western Europe.

# Aleiodes (Neorhogas) microculatus (Watanabe, 1937), comb. n.

Watanabe, 1937: 60 [Rhogas; holotype: female, Honshu, "19.VII 1927, Ikaho, Takeuchi" "Rhogas (Rhogas) microculatus Watanabe, Type, female"; EIS; examined]; Shenefelt, 1975: 1238.

- caliginosus Shestakov, 1940: 9 (*Rhogas*; syntypes: female, male, Primorskii krai, "Sedanka, 21.VI-10.VIII 1930; SMS), syn. n.; Telenga, 1941: 169 (*Rhogas*); Shenefelt, 1975: 1220 (Rogas).

MATERIAL. Primorskii krai: 2 females, 2 males, "Vladivostok, Sedanka, Malaise", 21-24.VI, 18.VII-10.VIII 1930 (syntypes); 2 females, "Vladivostok, Suchan, Malaise", 10-15.VII 1930 (syntypes); 1 female, Khasan, Golubinyi Utes, oak-forest, shrubs, 27. VIII 1988 (S.B.); 1 female, 30 km S Slavyanka, oak-forest, Corvlus, 3.VIII 1985 (S.B.); 1 female, 1 male, 15 km SW Slavyanka, oak-forest, meadow, 16.VI 1993, 31.VIII 1995 (S.B.); 1 female, "Kedrovaya Pad" Nature Reserve, forest, 27-30.VIII 1995 (S.B.); 1 female, Vladivostok, Sedanka, oak-forest, 5.IX 1985 (S.B.); 1 female, 1 male, Vladivostok, Morskove cemetery, oak-forest, 23.VI 1985 & 24.VIII 1988 (S.B.); 1 male, 30 km SE Ussuriysk, Ussuriysk Nature Reserve, forest, 10-11.VI 1993 (S.B.); 4 females, Spassk-Dal'nii, forest, border of forest, glades, 10-12.VII 1993, 30.VI 1995, 9-11.VII 1995 (S.B.); 1 female, 10 km E Spassk-Dal'nii, forest, 20.IX 1988 (S.B.); 1 female, 1 male, 20 km SE Spassk-Dal'nii, Evseevka, forest, 9.VII 1993 (S.B.); 1 male, 30 km E Spassk-Dal'nii, forest, 7.VII 1993 (S.B.); 1 female, 35 km NE Spassk-Dal'nii, Vasil'kovka, forest, meadow, 13.VII 1993 (S.B.); 1 female, 15 km E Dmitrievka, Merkushevka, forest, glades, 21.VII 1991 (S.B.); 1 female, 10 km SW Sokol'chi, Lazovskiy Nature Reserve, forest, glades, 22-24.VII 1993 (S.B.);

DISTRIBUTION. Russia: Primorskii krai. Japan (Hokkaido, Honshu).

#### Aleiodes (Neorhogas) praetor (Reinhard, 1863)

Shenefelt, 1975: 1244 (*Rogas*); Tobias, 1976: 84 (*Rogas*); 1986b: 78 (*Rogas*); Papp, 1985a: 148; 1985b: 348; 1989: 86; He & Chen, 1990: 202, 207; Papp, 1991: 73.

MATERIAL. Primorskii krai: 2 males, 20 km E Ussuriysk, at light. 27.VIII 1984 (S. Sinev); 1 male, 20 km SE Ussuriysk, at light, 30.VII 1991 (S.B.); 1 female, Spassk-Dal'nii, forest, border of forest, 23.VII 1991 (S.B.); 1 male, 20 km SW Kamen'-Rybolov, 10.VIII 1975 (A. Lelej); 6 females, 7 males, "Kedrovaya Pad'" Nature Reserve, at light, 7-8.VIII 1988 (E.B.); 1 male, Khasan District, Zanadvorovka, 11.VII 1985 (Z. Berest); 1 male, 30 km S Slavyanka, at light, 5.VIII 1985 (S.B.).

DISTRIBUTION. Russia: Primorskii krai (first record), south of the European part. Japan, Korea, China, Western Europe.

## Aleiodes (Neorhogas) rufipes (Thomson, 1891)

Shenefelt, 1975: 1246 (*Rogas*); Tobias, 1976: 85 (as *Rogas jaroslavensis* Kok.); 1986b: 81 (*Rogas*); Papp, 1985a: 149; 1991: 80; Chen & al., 1992: 496; Kotenko, 1992: 96.

MATERIAL. Primorskii krai: 1 female, 12 km S Khorol', forest, 6.VI 1979

(S.B.); 1 female, 20 km SW Putsilovka, Monakino, forest, glades, 24-28.VI 1993 (S.B.).

DISTRIBUTION. Russia: Primorskii krai (first record), Buryatiya, European part. China, Ukraine, Western Europe.

#### Aleiodes (Neorhogas) sapporensis (Watanabe, 1937), comb. n.

Watanabe, 1937: 61 [Rhogas; holotype: female, Hokkaido, "Sapporo, H. Yaku, 28/VII 1929", "Rhogas (Rhogas) sapporensis Watanabe, Type, female"; EIS; examined); Shenefelt, 1975: 1248 (Rogas).

- ussuriensis Telenga, 1941: 170 (Rhogas; holotype: female, Primorskii krai, "Vinogradovka, Ussur[iyskii] kr[ai], 2.VI [1]929, D'yakonov, Filip.['ev]", "Rhogas ussuriensis sp. n., N. Telenga det."; ZIP; examined), syn. n.; Shenefelt, 1975: 1255 (Rogas); Chen & al., 1992: 496.

MATERIAL. Primorskii krai: 1 male, Vysokogorsk, mixed forest, 6.VI 1985 (S.B.); 1 male, 10 km E Chernigovka, Gribnoe, 23.V 1995 (A. Lelej). Kuril Islands: 1 male, Kunashir I., Dubovoye, oak-forest, 25.VII 1981 (S.B.); 1 male, Kunashir I., Yuzhno-Kuril'sk, Lesnaya River, 19.VIII 1989 (A. Lelej). Japan: 1 male, Sapporo, 29.V 1932 (H. Yaku).

DISTRIBUTION. Russia: Primorskii krai, Kuril Is. Japan (Hokkaido), China.

#### Aleiodes (Neorhogas) sibiricus (Kokujev, 1903)

Telenga, 1941: 187 (*Rhogas*); Shenefelt, 1975: 1250 (*Rogas*); Papp, 1985a: 162; Tobias, 1976: 84 (*Rogas*); 1986b: 76 (*Rogas*); Papp, 1991: 92.

MATERIAL. Amurskaya oblast': 2 females, Zeya, 20.VI 1914 (Kozhanchikov); 1 female, Shimanovsk, 5.VI 1957 (collector unknown). Kamchatka: 1 female, Mil'kovo, birch-forest, 7.VII 1985 (S.B.). Primorskii krai: 1 female, 10 km N Pos'et, forest, 30.V 1979 (S.B.); 2 females, Barabash-Levada, at light, 14.VI 1978, 11.V 1980 (S.B.); 1 female, same locality, 29.V 1980 (Konovalov); 1 female, Brovnichi, Tigrovaya River, 4.VI 1994 (A. Lelej).

DISTRIBUTION. Russia: Kamchatka (first record), Amurskaya oblast', Primorskii krai (first record), Irkutskaya oblast', north of European part. Kazakhstan, Hungary, Germany, Italy.

# Aleiodes (Neorhogas) sirin Belokobylskij, sp. n. (Figs 28-36)

Holotype: female, Kuril Islands, Kunashir Island, Sernovodsk, glades, 22.VII 1981 (S. Belokobylskij) (ZIP). Paratypes. 1 female, 1 male, Khabarovskii krai, Khekhtsir Mt. near Khabarovsk, forest, 12.VI 1985 (S.B.) (ZIP); 3 males, Primorskii krai, 30 km SE Ussuriysk, Ussuriysk Nature Reserve, forest, 10 & 11.VI 1993 (S.B.) (ZIP); 1 male, Chuguevka District, Samarka, forest, 29- 30.V 1993 (S.B.) (ZIP); 1 male, Anisimovka, forest, meadow, 5-7.VI 1993 1985 (S.B.) (ZIP).

DESCRIPTION. Female. Body length 9.6-9.8 mm; fore wing length 8.5-8.6 mm. Head width 1.8 times its medial length. Temple distinctly and weakly roundly narrowed behind eye. Transverse diameter of eye 1.4-1.5 times as long as temple. Occiput weakly concave. Ocelli large, almost in equilateral triangle. POL 0.6 times Od, OOL 1.1-1.3 times POL, 0.6-0.8 times Od. Eye large, glabrous, kidney-shaped, 1.8-2 times as high as broad. Cheek height 0.25-0.3 times height of eye, 0.6-0.7 times basal width of mandible. Face with fine vertical medial carina, its minimum width 0.9 times height of eye and 1.5 times height of face and clypeus combined. Clypeus long and convex. Clypeal suture distinct. Tentorial pits small. Hypoclypeal depression rather large, round, its width 1.7-1.8 times distance from edge of depression to eye. Occipital carina fine dorsally and not curved towards ocelli, not fused lower at short distance with hypostomal one.

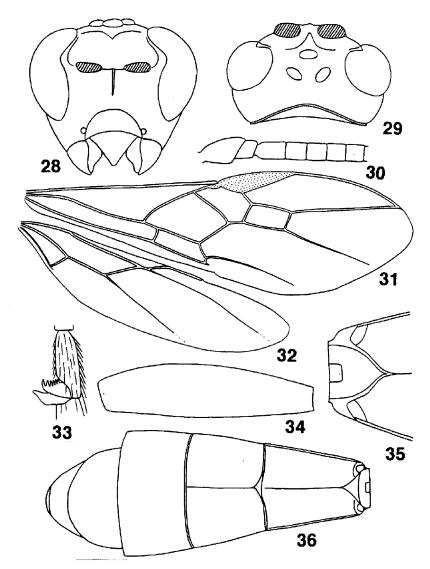
Antennae weakly setiform, 58-segmented, 0.9 times as long as body. 1st flagellar segment 1.5 times as long as its apical width, 1.3 times 2nd segment. Medial segments almost square. Penultimate segment 1.3 times as long as wide, 0.5 times as long as 1st segment, 0.6 times as long as apical segment, which is with slender apical spine.

Thorax. Length 1.6-1.8 times its height. Subpronope absent. Notauli rather deep, complete, almost smooth. Scutellum without lateral carinae. Prescutellar depression rather shallow, with 3-5 carinae, sparsely rugulose, 0.25 times as long as scutellum. Subalar depression shallow, wide and rugulose. Sternauli lost. Metapleural lobe rather short, wide, with lateral keel.

Wings. Length of fore wing 3-3.2 times its maximum width. Radial cell slightly shortened. Metacarpus 1.5 times length of pterostigma. Radial vein arising distinctly before middle of pterostigma. 1st radial abscissa 0.8-1 times as long as maximum width of pterostigma; 2nd abscissa 2.3 times 1st abscissa, 0.4 times almost straight 3rd abscissa, twice 1st radiomedial vein. 2nd radiomedial cell rather long, almost rectangular, not narrowed apically, its length 1.8-2 times its maximum width, 0.7-0.9 times length of brachial cell. Recurrent vein 2.5-3.5 times 2nd abscissa of medial vein. Distance from nervulus to basal vein 1-1.4 times nervulus length, 0.3 times distance from nervulus to recurrent vein. Hind wing 3.8-4 times as long as wide. 1st abscissa of mediocubital vein 1.2 times 2nd abscissa. 1st abscissa of costal vein 0.7 times 2nd abscissa. Radial vein pigmented, distinctly widened towards apex. Recurrent vein lost.

Legs. Hind femur 3.9-4.3 times as long as wide. Inner spur of hind tibia 0.35-0.4 times hind basitarsus. Hind tarsus 0.9 times as long as hind tibia; hind basitarsus 0.7 times combined length of 2nd-5th segments. 2nd tarsal segment 0.4 times as long as basitarsus, 0.9-1 times as long as 5th segment (without pretarsus). Tarsal claw pectinate.

Abdomen 1.1-1.2 times head and thorax combined. 1st tergite regularly and linearly widened basally, with deep dorsope and with spiracles in basal quarter, its



Figs 28-36. Aleiodes (Neorhogas) sirin sp. n. 28) head, frontal view; 29) head, dorsal view; 30) basal segments of antenna; 31) fore wing; 32) hind wing; 33) 5th segment and claw of hind leg; 34) hind femur; 35) basal area of 1st abdominal tergite; 36) abdomen, dorsal view.

basal area rather long, gradually and sharply narrowed towards apex, with single apical angle. Apical width of 1st tergite 2.2 times its basal width; its length 1.1 times apical width. 2nd suture distinct. 2nd tergite with smooth triangle basal area. Medial length of 2nd tergite 0.9 times its basal width, 0.7 times its apical width, 1.2 times length of 3rd tergite. Ovipositor sheath 0.6-0.8 times as long as 2nd segment of hind tarsus.

Sculpture. Vertex densely punctulate, sometimes with sparse rugae and granulae. Frons and temple almost smooth. Face punctulate-rugose. Mesoscutum and scutellum densely and finely punctulate, rugulose at narrow area medioposteriorly. Mesopleura smooth and shine. Metapleura finely punctulate, rugulose at posterior quarter. Propodeum densely rugulose, with complete medial carina. Hind coxa smooth, with fine punctulation, partly striate dorsally. 1st and 2nd abdominal tergites densely and irregularly reticulate-rugulose, with complete medial longitudinal carinae. 3rd tergite densely punctulate, almost smooth in apical third.

Colour. Body black. Antennae entirely black. Palpi and tegulae dark reddish brown. Fore leg reddish brown, middle leg dark reddish brown, hind leg entirely black or dark reddish brown. Wings faintly infuscate. Pterostigma and veins black.

Male. Body length 8.5-9.2 mm; fore wing length 7.5-8 mm. Antenna 60-segmented, slightly longer than body. Sometimes fore leg entirely and medial trochanters, femur and greatest part of tibia light reddish brown. Otherwise similar to female.

DISCUSSION. This species is related to A. (N.) dissector (Nees) and differs by having the palpi and tegulae dark reddish brown, hind leg entirely black, ocelli smaller, cheek longer, 1st and 2nd abdominal tergites distinctly rugulose, face wider.

DISTRIBUTION. Russia: Khabarovskii krai, Primorskii krai, Kuril Is.

## Aleiodes (Neorhogas) unipunctator (Thunberg, 1822)

Shenefelt, 1975: 1254 (Rogas); Tobias, 1976: 84 (Rogas); 1986b: 78 (Rogas); Papp, 1985a: 151; 1991: 86; Chen & He, 1992: 125.

MATERIAL. Sakhalin: 1 female, Ozerskii, coniferous forest, 19.VII 1978 (S.B.). Kuril Islands: 1 male, Kunashir I., Yuzhno-Kuril'sk, 3.VII 1975 (Berezantsev); 1 female, Yuzhno-Kuril'sk, Screbryanoe Lake, 24.VII 1973 (D.K.); 1 female, Yuzhno-Kuril'sk, Goryachii Plyazh, border of forest, 2.VII 1988 (A.K.); 1 female, Kunashir I., 1-10 km N Dubovoye, 18.VII 1973 (D.K.); 1 female, Dubovoye, 20.VII 1973 (D.K.); 4 females, 1 male, Shikotan I., road to Bay Krai Sveta, 15.VIII 1975 (A. Kupyanskaya); 1 female, same locality and date (O. Zheltonozhko); 1 female, Shikotan I., Bay Tserkovnaya, 16.VIII 1973 (D.K.).

DISTRIBUTION. Russia: Sakhalin (first record), Kuril Is. (first record), Siberia, European part. China (Qinghai), Kirghizia, Belarus, Western Europe.

# Aleiodes (Neorhogas) wadai (Watanabe, 1937), comb. n.

Watanabe, 1937: 58 [*Rhogas*; holotype: female, Shikoku, "Hongawa (Tosa), VI. 1932, H. Wada", "*Rhogas (Rhogas) wadai* Watanabe, female, Type"; EIS; examined); Shenefelt, 1975: 1256 (Rogas).

MATERIAL. Primorskii krai: 1 male, Spassk-Dal'nii, shrubs, meadow, 6.VIII 1995 (S.B.); 1 female, 7 km N Zanadvorovka, at light, 8.VIII 1985 (S.B.); 1 female, 1 male, "Kedrovaya Pad'" Nature Reserve, 21-27.VIII 1976 (A. Berezantsev); 1 female, Khasan, oak forest, meadow with shrubs, 30.VIII 1988 (S.B.); 4 males, 15 km S Slavyanka, Ryazanovka, at light, 19-20.VIII 1983 (E.B.). Buryatiya: 1 male, Kyakhta, glades, 28.VII 1977 (A. Kupyanskaya).

DISTRIBUTION. Russia (first record): Buryatiya, Primorskii krai. Japan. REMARK. Hind femur of male of A. wadai is entirely black, while in female is black only basally.

# Aleiodes (Aleiodes) buzurae He et Chen, 1990

He & Chen, 1990: 204,208.

MATERIAL. Primorskii krai: 1 female, "Kedrovaya Pad" Nature Reserve, forest, 27-30.VIII 1995 (S.B.); 1 female, 20 km NW Spassk-Dal'nii, meadow and shrubs on the bank of Khanka Lake, 18.VIII 1995 (S.B.); 1 female, 20 km SEE Spassk-Dal'nii, forest, boder of forest, 5.VIII 1995 (S.B.); 1 female, 20 km SE Spassk-Dal'nii, forest, boder of forest, 13.VIII 1995 (S.B.); 1 female, Anisimovka, forest, 11.VII 1984 (S.B.); 1 female, Vysokogorsk, mixed forest, 6.VI 1985 (S.B.); 1 female, Chuguevka District, collected 1.VIII 1974, reared from caterpillar of Tortricidae from the young fir (Kashcheev). Sakhalin: 1 female, 5 km W Ozerskii, coniferous forest, 12.VIII 1981 (S.B.). Kuril Islands: 1 female, Kunashir I., Alekhino, 23.VIII 1975 (A. Kupyanskaya). Japan: 1 female, Kyushu I., Kumamoto Pref., Yamaingiri, Izumi-mura, 1100 m, at light, 27.VI 1992 (V.M.).

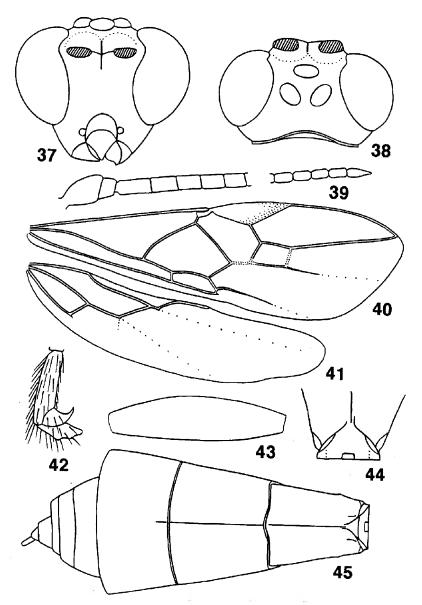
HOST. Buzura supressaris (Guenee) (Geometridae).

DISTRIBUTION. Russia (first record): Primorskii krai, Sakhalin I., Kuril Is. Japan (first record) (Kyushu). China (Zhejiang Prov.).

# Aleiodes (Aleiodes) eous Belokobylskij, sp. n. (Figs 37-45)

Holotype: female, Primorskii krai, Spassk-Dal'nii, forest, glades, 11.08 1995 (S. Belokobylskij) (ZIP). Paratypes. 2 females, Sakhalin Island, Novoaleksandrovsk, forest, 27.VII 1978 (S.B.) (ZIP); 2 females, same locality, floodland of Krasnosel'skaya River, forest, 27.VIII 1988 (A.K.) (IZANU); 1 male, Kunashir Island, volcano Golovnina, Goryachee Lake, 20.VIII 1988 (A. Basarukin) (IZANU).

DESCRIPTION. Female. Body length 5.5-6.9 mm; fore wing length 4.7-5 mm. Head width 1.7-1.8 times its medial length. Temple strongly and linearly



Figs 37-45. Aleiodes (Aleiodes) eous sp. n. 37) head, frontal view; 38) head, dorsal view; 39) basal and apical segments of antenna; 40) forc wing; 41) hind wing; 42) 5th segment and claw of hind leg; 43) hind femur; 44) basal area of 1st abdominal tergite; 45) abdomen, dorsal view.

narrowed behind eye. Transverse diameter of eye 3.5-4 times as long as temple. Occiput weakly concave. Ocelli large, almost in equilateral triangle. POL 0.4-0.5 times Od, OOL nearly equal to POL, 0.4-0.5 times Od. Eye large, oval, sparsely and shortly setose, 1.25-1.3 times as high as broad. Cheek height 0.2-0.25 times height of eye, 0.7-0.9 times basal width of mandible. Face with fine vertical medial carina in upper third, its minimum width 0.7 times height of eye and 0.8-0.9 times height of face and clypeus combined. Clypeus weakly convex and long. Clypeal suture distinct, but shallow upper. Tentorial pits small. Hypoclypeal depression small, round, its width nearly equal to distance from edge of depression to eye. Occipital carina not curved towards ocelli, fused lower with hypostomal one.

Antennae weakly setiform, 50-52-segmented, 1.1-1.3 times as long as body. 1st flagellar segment 2-2.3 times as long as its apical width, 1.3-1.4 times 2nd segment. Medial segments longer than wide. Penultimate segment 1.8-2 times as long as wide, 0.5-0.6 times as long as 1st segment, 0.7 times as long as apical segment, which is with thin apical spine.

Thorax. Length 1.8-2 times its height. Subpronope absent. Notauli distinct in anterior half, lost in posterior half, crenulate. Scutellum with distinct lateral carinae. Prescutellar depression rather shallow, with medial carina, rugulose-striate, 0.2-0.3 times as long as scutellum. Subalar depression shallow and rugulose. Sternauli very shallow and widely reticulate-rugulose. Metapleural lobe short, round, without lateral keel.

Wings. Length of fore wing 3-3.3 times its maximum width. Radial cell unshortened, length of pterostigma 0.7-0.8 times length of metacarp. Radial vein arising slightly behind middle of pterostigma. 1st abscissa 1-1.2 times as long as maximum width of pterostigma; 2nd radial abscissa 1.2-1.5 times 1st abscissa, 0.3 times 3rd abscissa, 1.2-1.3 times 1st radiomedial vein. 2nd radiomedial cell short, almost rectangular, slightly narrowed apically, its length 1.7-1.8 times its maximum width, 0.8-0.9 times length of brachial cell. Recurrent vein 1.6-1.7 times 2nd abscissa of medial vein. Distance from nervulus to basal vein 3.5-4 times nervulus length, 0.8-0.9 times distance from nervulus to recurrent vein. Hind wing 4 times as long as wide. 1st abscissa of mediocubital vein 1.7-2 times 2nd abscissa. 1st abscissa of costal vein 0.8-0.9 times 2nd abscissa. Radial vein unpigmented, almost parallel to anterior margin of hind wing. Recurrent vein present, but short and strongly unpigmented.

Legs. Hind femur thickened, 3.8-4.3 times as long as wide. Inner spur of hind tibia 0.3-0.4 times hind basitarsus. Hind tarsus 1.1 times as long as hind tibia; hind basitarsus 0.6 times combined length of 2nd-5th segments. 2nd tarsal segment 0.5 times as long as basitarsus, 1.3 times as long as 5th segment (without pretarsus), which is thickened. Tarsal claw simple.

Abdomen nearly as long as head and thorax combined, distinctly regularly and linearly widened from base of 1st tergite to apex of 3rd tergite, weakly con-

vex, 3rd tergite usually almost covered posterior tergites. 1st tergite regularly and linearly widened to apex, with deep dorsope and spiracles in basal quarter, its basal area short, gradually and sharply narrowed towards apex, with single apical angle. Apical width of 1st tergite 2-2.2 times its basal width; its length 1.1-1.2 times apical width. 2nd suture distinct. 2nd tergite without basal area. Medial length of 2nd tergite nearly equal to its basal width, 0.8 times its apical width, 1.2-1.3 times length of 3rd tergite. Maximum width of abdomen (on apex of 3rd tergite) 1.3-1.5 times basal width 2nd. Ovipositor sheath nearly equal to 2nd segment of hind tarsus.

Sculpture. Head coarsely reticulate-rugose, with fine granulation around eyes. Mesoscutum reticulate-rugose, finely anteriorly, with fine granulation. Scutellum finely reticulate- rugulose. Mesopleura punctulo-reticulate anteriorly and posteriorly, smooth in rather small medial area. Metapleura rugose. Propodeum entirely rugose-reticulate, with medial carina in basal two thirds or whole. Hind coxa concentrically striate, coriaceous ventrally. 1st-3rd abdominal tergites densely striate, with fine transverse rugae between striae, 2nd tergite with distinct medial carina. Rest tergites fine coriaceous.

Colour. Body yellowish brown, with faint dark dorsal spots on thorax and especially abdomen. Antenna yellowish brown, darker apically. Palpi yellow. Legs pale brown or pale yellow. Wing almost hyaline. Pterostigma brown, pale in basal third or half.

Male. Body length 5.7 mm; fore wing length 4.6 mm. Eye larger. Minimum width of face 0.8 times height of face and clypeus combined. Width of hypostomal depression 1.3 times distance from edge of depression to eye. In hind wing recurrent vein lost. Medial length of 2nd tergite 1.1 times its basal width. Otherwise similar to female.

DISCUSSION. New species is related to Palaearctic A. (A.) pallidator (Thunb., 1822) and differs by having the abdomen distinctly, regularly and linearly widened from base of 1st tergite to apex od 3rd tergite, temple very short, scutchlum with numerous rugae, mesopleurae without granulation and partly smooth, 2nd radiomedial cell short, nervulus arising almost from middle of posterior side of discoidal cell.

DISTRIBUTION. Russia: Primorskii krai, Sakhalin Is., Kuril Is.

### Aleiodes (Aleiodes) heterogaster Wesmael, 1838

Shenefelt, 1975: 1176; Tobias, 1976: 87 (Rogas); 1986b: 82 (Rogas); Papp, 1991: 97.

MATERIAL. Primorskii krai: 2 females, 30 km S Slavyanka, Andreevka, at light, 2-3.VIII 1985 (S.B.); 1 female, 20 km SE Ussuriysk, at light, 5.VIII 1991 (S.B.); 1 male, Ussuriysk, dry meadow, 15.VI 1993 (S.B.); 2 females, 1 male, Spassk-Dal'nii, forest, meadow, 30.VI 1985, 19.VIII 1991, 10-12.VII 1993 (S.B.); 1 male, "Kedrovaya Pad" Nature Reserve, at light, 9.VIII 1986

(E.B.); I male, Vladivostok, Okeanskaya, forest, 20.VI 1984 (S.B.). Kamchatka: 1 female, 10 km S Kozyrevsk, forest, volcano sand, 16.VII 1985 (S.B.); 1 female, Kozyrevsk, mixed forest, 24.VII 1985 (S.B.). Kuril Island: 1 female, Kunashir I., Dubovoye, oak-forest, 25.VII 1981 (S.B.).

DISTRIBUTION. Russia: Kamchatka (first record), Primorskii krai (first record), Kuril Is. (first record); European part. Western Europe.

REMARKS. The specimens from Primorskii krai and Kunashir Island have usually yellowish brown coloration of prothorax, lower part of head and big medial spot on the 2nd abdominal tergite.

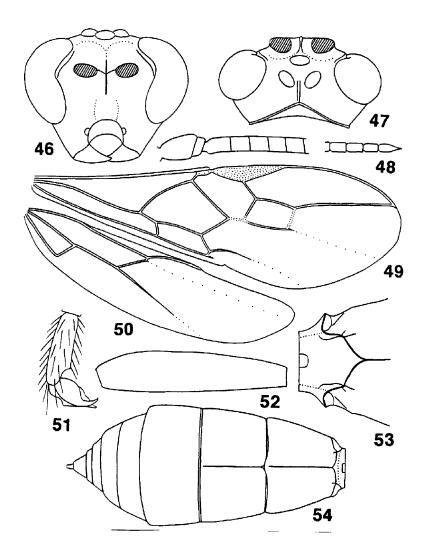
# Aleiodes (Aleiodes) krasheninnikovi Belokobylskij, sp. n. (Figs 46-54)

Holotype: female, Kunashir Island, volcano Golovnina, 2.VIII 1989 (A. Lelej) (ZIP). Paratypes. 1 female, Kunashir Island, Alekhino, border of forest, high grass, 11.VIII 1988 (A.K.) (IZANU); 1 male, some locality, 15.VIII 1988 (A. Zinovjev) (ZIP); 2 females, Kunashir Island, Yuzhno-Kuril'sk, spring Kislyi, 12.VIII 1983 (Basarukin) (ZIP).

DESCRIPTION. Female. Body length 6 mm; fore wing length 6 mm. Head width twice its medial length. Vertex with longitudinal medial furrow from occipital carina to ocellar field. Temple strongly and almost linearly narrowed behind eye. Transverse diameter of eye 1.8-2 times as long as temple. Occipital weakly concave. Ocelli large, almost in equilateral triangle. POL 0.6 times Od, OOL 1.3 times POL, 0.8 times Od. Eye middle-sized, glabrous, kidney-shaped, 1.7 times as high as broad. Check height 0.4 times height of eye, 1.2 times basal width of mandible. Face slightly convex, with vertical medial carina in upper half, its minimum width 0.9 times height of eye and 1.3 times height of face and clypeus combined. Clypeus convex and rather short. Clypeal suture distinct. Tentorial pits small. Hypoclypeal depression small, round, its width 0.7 times distance from edge of depression to eye. Occipital carina weakly curved towards ocelli, fused lower with hypostomal one. Head lower eyes linearly and distinctly narrowed.

Antennae setiform, 56-segmented, 1.3 times as long as body. 1st flagellar segment 1.4 times as long as its apical width, 1.2 times 2nd segment. Medial segments longitudinal. Penultimate segment twice as long as wide, 0.6 times as long as 1st segment, 0.6 times as long as apical segment, which is with thin and long apical spine.

Thorax. Length 1.5 times its height. Subpronope fine. Notauli shallow (especially posteriorly), complete, crenulate. Prescutellar depression deep, with medial carina, coarsely striate, smooth between striae, 0.3 times as long as scutellum. Scutellum almost flat and finely carinate laterally. Subalar depression shallow, wide and rugulose. Sternauli lost. Metapleural lobe short, wide, round apically, with distinct lateral keel.



Figs 46-54. Aleiodes (Aleiodes) krasheninnikovi sp. n. 46) head, frontal vicw; 47) head, dorsal view; 48) basal and apical segments of antenna; 49) fore wing; 50) hind wing; 51) 5th segment and claw of hind leg; 52) hind femur; 53) basal area of 1st abdominal tergite; 54) abdomen, dorsal view.

Wings. Length of forewing 3 times its maximum width. Radial cell unshortened. Pterostigma narrow, its length 0.6 times length of metacarp. Radial vein arising distinctly before middle of pterostigma. 1st radial abscissa 1.5 times as long as maximum width of pterostigma; 2nd abscissa 1.7 times 1st abscissa, 0.4 times 3rd abscissa, 1.6 times 1st radiomedial vein. 2nd radiomedial cell short, almost rectangular, very slightly narrowed apically, its length 1.8 times its maximum width, 0.8 times length of brachial cell. Recurrent vein twice 2nd abscissa of medial vein. Nervulus declivous. Distance from nervulus to basal vein nearly 1.5 times nervulus length, 0.35 times distance from nervulus to recurrent vein. Length of hind wing 4 times its width. 1st abscissa of mediocubital vein 1.3 times 2nd abscissa. 1st abscissa of costal vein 0.8 times 2nd abscissa. Radial vein unpigmented, not widened towards apex. Recurrent vein lost.

Legs. Hind femur slender, 4.5 times as long as wide. Inner spur of hind tibia 0.3 times hind basitarsus. Hind tarsus as long as hind tibia; hind basitarsus 0.6 times combined length of 2nd-5th segments. 2nd tarsal segment 0.5 times as long as basitarsus, 1.2 times as long as 5th segment (without pretarsus). Tarsal claw simple.

Abdomen 1.1 times head and thorax combined. 1st tergite regularly and linearly widened to apex, with deep dorsope and pointed small basolateral processes, with fine spiracular tubercles nearly basal third, its basal area rather long, anteriorly almost parallel-sided, then gradually and sharply narrowed towards apex, with 3 angles apically. Apical width of 1st tergite 2.3 times its basal width; its length 0.9 times apical width. 2nd suture distinct. 2nd tergite without basal area. Medial length of 2nd tergite 0.7 times its basal width, 0.6 times its apical width, 1.1 times length of 3rd tergite. Combined length of 2nd and 3rd tergites 1.4 basal width of 2nd, 1.1 times apical width of 3rd. Apical width of 3rd tergite 1.3 times basal width of 2nd tergite. Ovipositor sheath 1-1.2 times as long as 2nd segment of hind tarsus.

Sculpture. Head densely and finely granulate, with sparse rugae on vertex and face. Mesoscutum and scutellum coriaceous-punctulate, mesoscutum undulately striate medioposteriorly. Mesopleura smooth and shining in lower two thirds. Metapleura smooth, rugulose-granulate in posterior quarter. Propodeum entirely rugulose-reticulate with granulation, with complete medial carina. Hind coxa rugulose-coriaceous dorsally. Ist and 2nd abdominal tergites entirely and 3rd in basal two thirds rugulose, 1st and 2nd tergites with medial carinae. Rest tergites very finely reticulo-punctulate.

Colour. Body light reddish or yellowish brown. Antennae reddish brown, darkened towards apex. Palpi yellow. Legs light or yellowish brown. Wing very faintly infuscate. Pterostigma black, yellow in basal quarter and apically.

Male. Body length 6 mm; fore wing length 6 mm. Transverse diameter of eye 1.7 times length of temple. Metapleura punctulo-granulated anteriorly or

very fine coriaceous almost entirely. Recurrent vein of hind wing present, but very short and desclerotized. Otherwise similar to female.

DISCUSSION. This species is related to Palaearctic A. (A.) modestus Reinh., 1863 and differs by having the head strongly transverse, temple almost linearly narrow behind eyes, ocelli large, hypoclypeal depression small, basal area of 1st tergite with 3 apical angles, 1st and 2nd tergites shorter, metapleura smooth at greater part, body light red-brown. Also new species is related to Palaearctic A. (A.) pallidator (Thunb.) and differs by having the meso- and metapleurae almost entirely smooth and shining, vertex with longitudinal furrow, 1st and 2nd abdominal tergites short and wide, hind wing of female without recurrent vein. New species differs from A. (A.) rossicus Kok. almost entirely smooth and shining meso- and metapleurae, short and roundly narrowed behind eye temple, glabrous eye, lost recurrent vein of hind wing of female, basal area of 1st tergite with 3 apical angles, thick antennal segments.

ETYMOLOGY. Species is named after S.P. Krasheninnikov, well-known Russian explorer of Kamchatka and Kuril Islands.

DISTRIBUTION. Russia: Kuril Is.

#### Aleiodes (Aleiodes) kuslitzkyi (Tobias), comb. n.

Tobias, 1976: 223 (Rogas); 1986b: 83 (Rogas); Papp, 1991: 110.

MATERIAL. Primorskii krai: 6 females, 5 males, Spassk-Dal'nii, forest, glades, 24.VIII 1984, 13-19.VII 1991, 6, 11, 22-23.VIII 1995 (S. Belokobylskij); 2 females, 3 males, 30 km E Spassk-Dal'nii, forest, glades, 2.VI 1984, 29. VIII 1984, 12. VII 1995 (S.B.); 2 females, 15 km SE Spassk-Dal'nii, forest, 1.IX 1984 (S.B.); 5 females, 5 males, 20 km SE Spassk-Dal'nii, Evseevka, forest, 18.VII 1991, 9.VII 1993, 13.VIII 1995 (S.B.); 3 females, 1 males, 20 km SEE Spassk-Dal'nii, forest, border of forest, 5.VIII 1995 (S.B.); 1 female, 35 km NE Spassk-Dal'nii, Vasil'kovka, forest, glades, 13.VII 1993 (S.B.); 1 male, Novokachalinsk, mixed forest on bank of Khanka Lake, 23.VII 1995 (S.B.); 4 females, 2 males, 7 km N Zanadvorovka, forest, glades, 8.VIII 1985 (S.B.); 4 males, 30 km S Slavyanka, forest, glades, 5.VIII 1985 (S.B.); 3 males, same locality, at light, 3.VIII 1985 (S.B.); 3 females, 2 males, 10 km SE Partizansk, oak-forest, 20-22.VII 1984 (S.B.); 2 males, 15 km NW Partizansk, forest, 18.VII 1984 (S.B.); 1 female, 1 male, Anisimovka, forest, glades, 12.VII 1984, 10.VIII 1991 (S.B.); 6 females, "Kedrovaya Pad" Nature Reserve, forest, 27-30.VIII 1995 (S.B.); 3 females, 1 male, 20 km SE Ussuriysk, 4-5.VIII 1991 (S.B.); 1 female, Ussuriysk Nature Reserve, at light, 1.VIII 1972 (V. Arefin); 1 female, Vladivostok, Sanatornaya, forest, 26.VII 1984 (S.B.). Kuril Islands: 1 female, Kunashir I., Alekhino, mixed forest, 30.VII 1981 (S.B.); 1 female, Shikotan I., Malokuril'sk, 20.VIII 1973 (D.K.). Japan: 1 female, 1 male, Miyazaki, Kuranosako, 1000 m, Shiiba-mura, 20.VII 1992 (V.M.); 1 male, Kumamoto, Mt. Yamaingiri, Izumi-mura, 1000-1300 m, 19.VII 1992 (V.M.).

DISTRIBUTION. Russia (first record): Primorskii krai, Kuril Is. Japan (first record) (Kyushu). Azerbaijan, Armenia, Georgia, Belarus.

#### Aleiodes (Aleiodes) lymantriae (Watanabe, 1937)

Watanabe, 1937: 57 (*Rhogas*; holotype: female, Hokkaido, "Sapporo, C. Watanabe, 11/VII 1934", "Wirt *Limantria dispar* L.", "*Rhogas lymantriae* Watanabe, female, Type"; EIS; examined); Shenefelt, 1975: 1236 (*Rogas*); He & Chen, 1990: 206, 208.

MATERIAL. Primorskii krai: 1 female, 50 km N Ol'ga, mixed forest. 29.VII 1979 (S.B.); 1 male, 10 km S Partizansk, oak forest, 19.VII 1979 (S.B.); 7 females, 20 km SE Ussuriysk, at light, 29.VII 1983, 10.VIII 1988 (E.B.); 1 female, 1 male, same locality, 31.VII 1991, 4.VIII 1991 (S.B.); 1 female, Khasan, Golubinyi Utes, oak forest, 26.VIII 1988 (S.B.).

DISTRIBUTION. Russia (first record): Primorskii krai. Japan (Hokkaido), China (Jilin, Hubei).

### Aleiodes (Aleiodes) procerus Wesmael, 1838

Shenefelt, 1975: 1244 (*Rogas*); Tobias, 1976: 86 (*Rogas*); 1986b: 81 (*Rogas*); Papp, 1985a: 149; 1991: 93.

MATERIAL. Primorskii krai: 1 female, 10 km E Spassk-Dal'nii, forest, 11.IX 1988 (S.B.); 1 female, 20 km SE Ussuriysk, forest, glades 1.VIII 1991 (S.B.); Sakhalin: 1 male, Novoaleksandrovsk, forest near hills, 29.VII 1988 (A.K.). Kuril Islands: 2 females, Kunashir I., Dubovoye, 31.VIII 1973, 1.IX 1973 (D.K.); 1 male, Shikotan I., Malokuril'sk, 20.VIII 1973 (D.K.); 2 males, Shikotan I., road to the Bay Krai Sveta, 15.VIII 1975 (A. Kupyanskaya).

DISTRIBUTION. Russia: Primorskii krai (first record), Sakhalin, Kuril Is. (first record), European part. Japan (Honshu, Shikoku), Western Europe.

# Aleiodes (Aleiodes) sichotealinus Belokobylskij, sp. n. (Figs 55-63)

Holotype: female, Primorskii krai, 30 km SE Chuguevka, 21.IX 1975 (T. Komarova) (ZIP).

DESCRIPTION. Female. Body length 9.5 mm; fore wing length 9.5 mm. Head width 1.7 times its medial length. Temple strongly and almost linearly narrowed behind eye. Frons concave. Transverse diameter of eye 2.5 times as long as temple. Occiput weakly concave. Ocelli large, almost in equilateral triangle. POL 0.4 times Od, OOL nearly equal to POL, 0.4 times Od. Eye large, kidney-shaped, shortly and sparsely setose, 1.6 times as high as broad. Cheek height 0.2 times height of eye, 0.6 times basal width of mandible. Face with distinct vertical medial carina in upper half, its minimum width 0.7 times height of eye and 1.1 times height of face and clypeus combined. Clypeus rather long, convex in upper half, distinctly and oblique cut in lower half. Clypeal suture distinct. Tentorial pits distinct. Hypoclypeal depression medium-sized, round, its

width 1.3 times distance from edge of depression to eye. Occipital carina weakly and widely curved towards ocelli, not fused lower at short distance with hypostomal one.

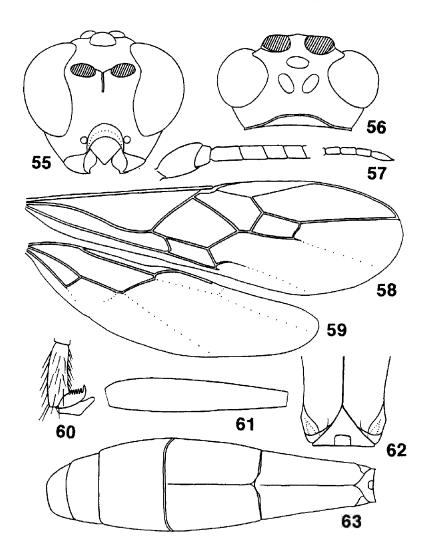
Antennae setiform, 62-segmented, 1.2 times as long as body. 1st flagellar segment 1.8 times as long as its apical width, 1.25 times 2nd segment. Medial segments longer than wide. Penultimate segment 2.2 times as long as wide, 0.55 times as long as 1st segment, 0.6 times as long as apical segment, which is with thin apical spine.

Thorax. Length 1.8 times its height. Subpronope very fine. Notauli rather shallow, narrow, crenulate. Scutellum with distinct lateral carinae. Prescutellar depression long, deep, with medial carina, carinate, 0.3 times as long as scutellum. Subalar depression shallow and granulate. Sternauli very shallow and rugulose-granulate. Metapleural lobe rather long, round apically, with distinct lateral keel.

Wings. Length of fore wing 3.5 times its maximum width. Radial cell unshortened, length of pterostigma 1.2 times length of metacarp. Radial vein arising before middle of pterostigma. 1st radial abscissa 1.3 times as long as maximum width of pterostigma; 2nd radial abscissa twice 1st abscissa, 0.4 times 3rd abscissa, 1.8 times 1st radiomedial vein. 2nd radiomedial cell rather short, slightly narrowed apically, its length 1.9 times its maximum width, 0.8 times length of brachial cell. Recurrent vein 3 times 2nd abscissa of medial vein. Distance from nervulus to basal vein as long as nervulus, 0.3 times distance from nervulus to recurrent vein. Nervulus strongly declivous and curved distally. Hind wing 3.5 times as long as wide. 1st abscissa of mediocubital vein 1.5 times 2nd abscissa. 1st abscissa of costal vein 0.7 times 2nd abscissa. Radial cell with unpigmented transverse vein in basal two fifths. Radial vein arising from basal vein, unpigmented, almost parallel to anterior margin of hind wing in basal two fifths (before transverse vein), weakly widened towards apex. Recurrent vein present, but short, antefurcal and unpigmented.

Legs. Hind femur slender, 5.5 times as long as wide. Inner spur of hind tibia 0.3 times hind basitarsus. Hind tarsus 1.1 times as long as hind tibia; hind basitarsus 0.6 times combined length of 2nd-5th segments. 2nd tarsal segment 0.5 times as long as basitarsus, 1.5 times as long as 5th segment (without pretarsus), which is thickened. Tarsal claw pectinate.

Abdomen 1.2 times as long as head and thorax combined, elongate. 1st tergite regularly and almost linearly widened to apex, with deep dorsope and very fine spiracular tubercles in basal third, its basal area short and gradually narrowed towards apex, with single apical angle. Apical width of 1st tergite twice its basal width; its length 1.6 times apical width. 2nd suture deep and crenulate. 2nd tergite without basal area. Medial length of 2nd tergite 1.2 times its basal width, nearly equal to its apical width, 1.3 times length of 3rd tergite. Ovipositor sheath 0.5 times as long as 2nd segment of hind tarsus.



Figs 55-63. Aleiodes (Aleiodes) sichotealinus sp. n. 55) head, frontal view; 56) head, dorsal view; 57) basal and apical segments of antenna; 58) fore wing; 59) hind wing; 60) 5th segment and claw of fore leg; 61) hind femur; 62) basal area of 1st abdominal tergite; 63) abdomen, dorsal view.

Sculpture. Head finely and densely coriaceous, face rugulose-granulate. Mesoscutum and scutellum finely and densely coriaceous. Mesopleura coriaceous-punctulate. Metapleura granulate, with rugae in posterior third. Propodeum entirely rugulose-granulate, with complete medial carina. 1st and 2nd abdominal tergites with distinct medial carina; 1st tergite rugulose-punctulate with granulation, 2nd tergite punctulate-coriaceous, rest tergites very finely coriaceous.

Colour. Body yellowish brown. Antenna faintly darker towards apex. Palpi yellow. Fore legs yellow, middle and hind legs light reddish brown, tarsi pale yellow. Wing almost hyaline. Pterostigma light brown.

Male unknown.

DISCUSSION. New species is related to Palaearctic A. (A.) procerus Wesm. and differs by having the clypeus strongly and oblique cut in lower half, claws pectinate, nervulus strongly declivous and curved distally, radial vein of hind wing arising from basal vein and distinctly widened behind transverse vein, 1st abdominal tergite narrow and longer and without basal processes.

DISTRIBUTION. Russia: Primorskii krai.

#### Heterogamus dispar (Curtis, 1834)

Shenefelt, 1975: 1201; Tobias, 1976: 89; Achterberg, 1985: 181; Tobias, 1986b: 85; Papp, 1985b: 348; 1991: 116.

MATERIAL. Primorskii krai: 2 females, 1 male, 7 km N Zanadvorovka, forest, glades, 8.VIII 1985 (S.B.); 1 fcmale, "Kedrovaya Pad'" Nature Reserve, forest, 27-30.VIII 1995 (S.B.); 1 male, same locality, at light, 8.VIII 1988 (E.B.); 1 female, Vladivostok, Morskoye cemetery, oak-forest, 29.VIII 1985 (S.B.); 3 females, 15 km NW Partizansk, forest, 16.VIII 1985 (S.B.); 1 female, 1 male, Nakhodka, oak-forest, shrubs, 20.VIII 1985 (S.B.); 1 female, 10 km SW Sokol'chi, Lazovskii Nature Reserve, forest, glades, 22-24.VII 1993 (S.B.); 6 females, Spassk-Dal'nii, forest, glades, shrubs, 10-12.VII 1993, 19.VIII 1993, 9-15.VII 1995 (S.B.); 2 females, 20 km SEE Spassk-Dal'nii, forest, border of forest, 5.VIII 1995 (S.B.); 3 males, 20 km SE Spassk-Dal'nii, Evseevka, forest, 9.VII 1993 (S.B.); 1 female, 30 km E Spassk-Dal'nii, forest, 12.VII 1995 (S.B.); 3 females, Novokachalinsk, mixed forest on the bank of Khanka Lake, 23-25.VII 1995 (S.B.). Sakhalin: 1 male, 12 km W Aniva, mixed forest, 13.VII 1981 (S.B.). Kuril Islands: 2 females, Kunashir I., Sernovodsk, 26-27.VIII 1973 (D.K.); 1 male, Kunashir I., volcano Golovnina, Ozernaya River, forest, 20.VIII 1988 (A.K.); 1 female, Shikotan I., 5-7 km S Krabozavodsk, 17.VIII 1973 (D.K.). Japan: 1 female, Kumamoto, Mt. Yamaingiri, Izumi-mura, 1000m, 19.VII 1992 (V.M.); 1 male, Fukuoka, Hibaru, Fukuoka-shi, 12.VII 1992 (V.M.).

DISTRIBUTION. Russia: Primorskii krai (first record), Sakhalin (first record), Kuril Is. (first record), European part. Japan, Korea, Georgia, Western Europe.

#### Heterogamus excavatus (Telenga, 1941)

Telenga, 1941: 132; Shenefelt, 1975: 1201; Tobias, 1976: 89; Achterberg, 1985: 184 (*Aleiodes*); Tobias, 1986: 85.

MATERIAL. Primorskii krai: 2 males, 15 km NW Partizansk, forest, 18.VII 1984 (S.B.); 1 male, 30 km E Spassk-Dal'nii, forest, glades, 4.VI 1984 (S.B.); 1 male, Novokachalinsk, mixed forest on the bank of Khanka Lake, 23.VII 1995 (S.B.).

DISTRIBUTION. Russia: Primorskii krai (first record), European part. Kazakhstan, Kirghizia, Georgia, Central and Western Europe.

#### Heterogamus fasciatipennis (Ashmead, 1906), comb. n.

Shenefelt, 1975: 1201 (as synonym of *H. dispar Curtis*); Achterberg, 1985: 185 (*Aleiodes*).

MATERIAL. Sakhalin I.: 3 females, Novoalexandrovsk, 7.IX 1973 (D.K.); 1 female, Makarovskii District, Pugachovo, 6.IX 1988 (A. Basarukin). Kuril Is.: 1 female, Kunashir I., Sernovodsk, 26.VIII 1973 (D.K.); 1 female, same locality, 4-7.IX 1976 (L. Danilovich).

DISTRIBUTION. Russia (first record): Sakhalin I., Kuril Is. Japan (Hokkaido).

#### Heterogamus pallidinervis (Cameron, 1910)

Watanabe, 1937: 65 (*Rhogas*); 1957: 46 (*Rhogas*); Shenefelt, 1975: 1241 (*Rogas*); Papp, 1985b: 348.

MATERIAL. Primorskii krai: 1 female, Vladivostok, peninsula De-Friz, 12.VIII 1961 (Omel'ko); 3 females, 6 males, 30 km S Slavyanka, Andreevka, at light, 2- 5.VIII 1985 (S.B.); 3 males, 25 km S Slavyanka, Vityaz, at light, 3.VIII 1982 (I. Kerzhner).

DISTRIBUTION. Russia (first record): Primorskii krai. China, Korea, Japan.

#### Heterogamus takasuae (Achterberg, 1985), comb. n.

Achterberg, 1985: 183 (Aleiodes).

MATERIAL. Primorskii krai: 3 females, 30 km S Slavyanka, oak-forest, Corylus, 3-5.VIII 1985 (S.B.); 1 female, "Kedrovaya Pad'" Nature Reserve, forest, 31.VIII 1986 (A.K.); 2 females, same locality, 27-30.VIII 1995 (S.B.); 3 females, 7 km N Zanadvorovka, forest, glades, 8.VIII 1985 (S.B.); 1 females, Vladivostok, Akademgorodok, glades in the forest, 1.IX 1986 (A.K.); 1 female, 15 km NW Artem, forest, 6.IX 1988 (S.B.); 3 females, Spassk-Dal'nii, forest, glades, 19.VII 1991 & 16.VIII 1995 (S.B.); 1 female, 15 km NW Partizansk, forest, 16.VIII 1985 (S.B.).

DISTRIBUTION. Russia (first record): Primorskii krai. Japan.

# Rogas nigridorsum Belokobylskij, sp. n. (Figs 64-72)

Holotype: female, Primorskii krai, Spassk-Dal'nii, forest, glades, 17.VIII 1991 (S. Belokobylskij) (ZIP). Paratypes. Primorskii krai: 2 females, 1 male,

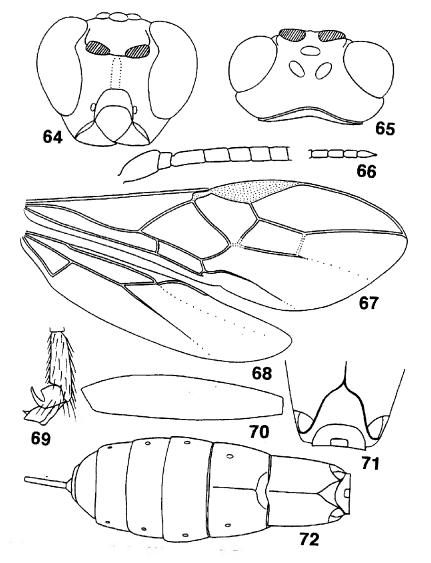
Khasan District, 7 km N Zanadvorovka, at light, 13.VIII 1984 (S. Sinev) (ZIP); 1 female, 20 km E Ussuriysk, Gornotaezhnoe, at light, 22.VIII 1985 (Z. Berest) (IZANU); 1 female, 1 male, Vladivostok, Morskoye cemetery, oak-forest, 24.VIII 1988, 8.VIII 1991 (S.B.) (ZIP); 1 female, 16 males, "Kedrovaya Pad" Nature Reserve, at light, 7-11.VIII 1988 (E.B.) (ZIP); 2 males, same locality, cordon "Sukhaya rechka", 5.VIII 1988 (E.B.) (ZIP).

DESCRIPTION. Female. Body length 4.3-8.2 mm; fore wing length 4.2-7.4 mm. Head width 1.8-2 times its medial length. Temple strongly and roundly narrowed behind eye. Transverse diameter of eye 1.8-2 times as long as temple. Occiput irregularly convex. Ocelli large, in equilateral triangle. POL 0.5-0.7 times Od, OOL 1-1.3 times POL, 0.5-0.7 times Od. Eye large, kidney-shaped, glabrous, 1.4-1.6 times as high as broad. Cheek height 0.15-0.18 times height of eye, 0.3-0.5 times basal width of mandible. Face almost flat, with fine vertical medial carina, its minimum width nearly 0.7 times height of eye and 1.2-1.4 times height of face and clypeus combined. Clypeus weakly convex and short. Clypeal suture distinct. Tentorial pits small. Hypoclypeal depression large, round, its width 1.8-2.3 times distance from edge of depression to eye. Occipital carina not curved towards ocelli, not fused lower at short distance with hypostomal one.

Antennae weakly setiform, 52-66-segmented, 1.3-1.4 times as long as body. 1st flagellar segment 2-2.2 times as long as its apical width, 1.2 times 2nd segment. Medial segments longer than wide. Penultimate segment 1.8-2 times as long as wide, 0.6 times as long as apical segment, which is with long and thin apical spine.

Thorax. Length 1.5-1.6 times its height. Subpronope absent. Notauli deep, complete and crenulate. Prescutellar depression deep, long, smooth or finely rugulose, with 1-3 medial carinae, 0.3-0.4 times as long as scutellum. Subalar depression rather shallow and rugulose. Sternauli short, oblique, almost smooth or finely crenulate. Metapleural lobe long, with lateral keel.

Wings. Length of fore wing nearly 3 times its maximum width. Radial cell slightly shortened, length of pterostigma 0.7- 0.8 times length of metacarp. Radial vein arising slightly before middle of pterostigma. 1st radial abscissa 0.8 times as long as maximum width of pterostigma; 2nd radial abscissa 2.4-2.8 times 1st abscissa, nearly 0.5 times 3rd abscissa, 1.3-1.5 times 1st radiomedial vein. 2nd radiomedial cell rather long, narrowed apically, its length 2.2-2.6 times its maximum width, nearly 1.2 times length of brachial cell. Recurrent vein concave, 5-6 times 2nd abscissa of medial vein. Distance from nervulus to basal vein nearly equal to nervulus length, 0.3 times distance from nervulus to recurrent vein. Parallel vein distinctly curved basally. Hind wing 4-4.5 times as long as wide. 1st abscissa of mediocubital vein 0.8-1 times 2nd abscissa. 1st abscissa of costal vein 0.5 times 2nd abscissa. Radial vein finely pigmented, arising from costal vein near basal vein, very weakly and regularly narrowed



Figs 64-72. Rogas nigridorsum sp. n. 64) head, frontal view; 65) head, dorsal view; 66) basal and apical segments of antenna; 67) fore wing; 68) hind wing; 69) 5th segment and claw of hind leg; 70) hind femur; 71) basal area of 1st abdominal tergite; 72) abdomen, dorsal view.

towards apex. Recurrent vein lost.

Legs. Hind coxa with distinct dorsal wide protuberance. Hind femur weakly thickened, 4.6-5 times as long as wide. Inner spur of hind tibia 0.25 times hind basitarsus. Hind tarsus nearly as long as hind tibia; hind basitarsus 0.75 times combined length of 2nd-5th segments. 2nd tarsal segment 0.4 times as long as basitarsus, nearly as long as 5th segment (without pretarsus), which is thickened. Tarsal claw with large and pointed basal lobe.

Abdomen 1.1-1.2 times as long as head and thorax combined. 1st tergite regularly and weakly roundly widened to apex, with deep dorsope and without spiracular tubercles, its basal area long and gradually narrowed towards apex, with single apical angle. Apical width of 1st tergite 1.5-1.7 times its basal width; its length 1.1 times apical width. 2nd suture deep and wide. 2nd tergite with wide semi-round basal area, medial length of 2nd tergite 0.65-0.7 times its basal width, 0.5-0.6 times its apical width, 1.2-1.3 times length of 3rd tergite. 2nd-6th tergites with distinct lateral oval sensory areas. Ovipositor sheath rather long, nearly twice as long as 2nd segment of hind tarsus, 0.7-0.8 times as long as basitarsus.

Sculpture. Head smooth; face entirely or at greater part and cheek partly rugose. Mesoscutum and scutellum finely and sparsely punctulate. Mesopleura smooth. Metapleura punctulate, rugulose posteriorly. Propodeum entirely rugose-reticulate, sometimes with medial carina. 1st-5th abdominal tergites rugulose-striate, 1st, 2nd and usually basal third of 3rd tergites with more or less distinct medial carina.

Colour. Body black, dark reddish or reddish brown. Head at lower third or quarter yellow. Mesopleura at greater part, axilla, metathorax and usually scutellum light reddish brown or yellowish brown. Antenna reddish or dark reddish brown. Palpi pale yellow. Legs yellow, apical two thirds of hind tibia and hind tarsus dark reddish brown or black. Wing faint infuscate. Pterostigma dark brown or black, parastigma yellowish.

Male. Body length 5-6.5 mm; fore wing length 4.7-6.2 mm. 2nd-4th segments of maxillary palpi, 1st and 2nd segments of labial palpi strongly thickened. Antenna 46-48-segmented, its segments slender and longer, length of 1st flagellar segment nearly 3 times its apical width; length of penultimate segment 2.7-3 times its width. Other similar to female.

DISCUSSION. New species is related to Eastern Asian *R. oyeyamensis* Watanabe, 1937 (holotype: female, Honshu, "8.IX 1928, Mt. Ooye, Coll. M.-Kato", "*Rhogas oyeyamensis* Watanabe, Type, female"; EIS; examined) [Watanabe, 1937; Chen & al., 1992 (as *Aleiodes*)] and differs by having the face wide, occipital carina not fused with hypostomal one, medial antennal segments long, 2nd abdominal tergite transverse, abdomen coarsely sculptured, dorsal part of body, greater part of hind tibia and hind tarsus dark brown or black, pterostigma dark. Also *R. nigridorsum* sp. n. is related to East Palaearetic *R*.

nigrovenosus (Voin.- Kr., 1935) and differs by having the ocelli large, face narrow, thorax long, sternauli smooth, propodeum densely and coarsely reticulate-rugulose, abdomen narrow, 2nd abdominal tergite with basal area, dorsal part of body and hind tarsus dark brown or black.

DISTRIBUTION. Russia: Primorskii krai.

## Triraphis pullus Papp, 1995

Papp, 1995: 124.

MATERIAL. Primorskii krai: 2 females, Anisimovka, forest, meadow, 5-7.VI 1993 (S.B.); 1 female, 1 male, 30 km SE Ussuriysk, Ussuriysk Nature Reserve, forest, 10-11.VI 1993 (S.B.); 2 females, 20 km SE Ussuriysk, forest, 5.VIII 1991 (S.B.); 1 female, 1 male, 30 km E Spassk- Dal'nii, forest, 27.VI 1985, 12.VII 1995 (S.B.); 1 female, 7 km N Zanadvorovka, forest, glades, 8.VIII 1985 (S.B.); 1 female, 30 km S Slavyanka, forest, glades, 5.VIII 1985 (S.B.); 1 female, 30 km S Slavyanka, forest, glades, 5.VIII 1985 (S.B.); 1 female, Vladivostok, Morskoye cemetery, oak-forest, 24.VIII 1988 (S.B.). Kuril Islands: 1 male, Kunashir I., 4 km S Alekhino, forest, 16. VIII 1988 (A.K.); 1 female, Shikotan I., Malokuril'sk, 20.VIII 1973 (D.K.).

DISTRIBUTION. Russia (first record): Primorskii krai, Kuril Is. Korea.

### Triraphis tricolor Wesmael, 1838

Shenefelt, 1975: 1209 (*Pelecystoma*); Tobias, 1976: 90 (*Pelecystoma*); 1986b: 85 (*Rogas*); Papp, 1989: 86 (*Rogas*); 1991: 119; 1995: 126.

MATERIAL. Primorskii krai: 2 females, "Kedrovaya Pad" Nature Reserve, forest, 27-30.VIII 1995 (S.B.); 2 females, 4 males, 30 km S Slavyanka, at light, 3-5.VIII 1985 (S.B.); 3 males, same locality, forest, glades, 5.VIII 1985 (S.B.); 2 females, 1 male, Vladivostok, Morskoye cemetery, oak-forest, 24.VIII 1988 (S.B.); 1 female, Nakhodka, oak-forest, shrubs, 20.VIII 1985 (S.B.); 1 female, Khanka District, Novokachalinsk, forest, 3.IX 1986 (A.K.); 2 males, Khasan, forest, 29.VIII 1988 (S.B.); 1 male, Anisimovka, glades, forest, 3.IX 1988 (S.B.); 1 male, 7 km N Zanadvorovka, at light, 13.VIII 1984 (S. Sinev). Khabarovskii krai: 1 male, Khabarovsk, Khekhtsir, 23.VII 1981 (D.K.). Kuril Islands: 1 female, Kunashir I., Dubovoye, 20.VII 1973 (D.K.); 1 female, Kunashir I., volcano Golovnina, Ozernaya River, forest, 20.VIII 1988 (A.K.); 1 male Kunashir I., Alekhino, mixed forest, 31.VII 1981 (S.B.); 1 male, Kunashir I., 3 km N Lagunnoe Lake, border of forest, glades, 9.VIII 1988 (A.K.).

DISTRIBUTION. Russia: Khabarovskii krai, Primorskii krai (first records), Kuril Is. (first record), European part. Japan, Korea, Armenia, Ukraine, Moldova, Western Europe.

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